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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,198	10/28/2003	Bernardo A. Huberman	200313922-1	4497

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INTELLECTUAL PROPERTY ADMINISTRATION  
FORT COLLINS, CO 80527-2400

EXAMINER
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GELAGAY, SHEWAYE

ART UNIT	PAPER NUMBER
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2137

NOTIFICATION DATE	DELIVERY MODE
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05/15/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/695,198	<b>Applicant(s)</b> HUBERMAN ET AL.	
	<b>Examiner</b> SHEWAYE GELAGAY	<b>Art Unit</b> 2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8-25 and 27-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-25 and 27-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This office action is in response to Applicant's amendment filed on February 26, 2008. Claims 1, 8-11 and 24 have been amended. Claims 7 and 26 are cancelled. New claims 28-29 have been added. Claims 1-6, 8-25 and 27-29 are pending.

### ***Response to Arguments***

2. Applicant's arguments filed February 26, 2008 have been fully considered but they are not persuasive. In response to the applicants arguments the following comments are made:

The applicant argued that the combination of Huberman, Yeager and Hanson fails to teach or even suggest "if the third encoded value matches the fourth encoded value, adjusting a total number of matches" and "enabling users of the first and second communication devices to physically locate one another only if said total number of matches meets or exceeds a threshold." The examiner disagrees. Huberman discloses an approach to multiple shared preferences to find people who answered questions in a compatible way. This can be done quite efficiently in the case where compatibility is measured by the number of yes/no questions that were answered in common. A basic preference-matching function takes as input two lists of yes/no answers and a threshold. It outputs "true" if the number of answers (i.e. total number of matches) where the two lists match is at or above the threshold. (i.e. meets or exceeds a threshold). (page 81, Private Preference Matching)

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-6, 10-18, 20 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huberman et al., "Enhancing Privacy and Trust in Electronic communities" (hereinafter Huberman) in view of Yeager et al. (hereinafter Yeager) U.S. Publication Number 2004/0133640 and in view of Hanson U.S. Patent Number 6,868,074.

As per claims 1 and 24:

Huberman teaches a method usable on a first communication device adapted to communicate with a second communication device, comprising:

obtaining a first key; encoding an attribute in the first communication device with the first key to produce a first encoded value; transmitting the first encoded value to the second communication device; receiving a second encoded value from the second

communication device, the second encoded value comprising an attribute stored in the second communication device that has been encoded with a second key associated with the second communication device; encoding the second encoded value with the first key to produce a third encoded value; transmitting the third encoded value to the second communication device; receiving a fourth encoded value from the second communication device, the fourth encoded value comprising the first encoded value after being encoded by the second key; and if the third encoded value matches the fourth encoded value, adjusting a total number of matches; and enabling users of first and second communication devices contact one another only if said total number of matches meets or exceeds a threshold. (page 80, 3.Community discovery; page 81, Private-Preference Matching; page 85, A. Cryptographic Details and Private Preference Matching) Huberman does not explicitly disclose the communication devices comprise mobile communication devices. Yeager in analogous art, however discloses a communication devices comprise mobile communication devices. (page 22, paragraph 242) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the method disclosed by Huberman with Yeager in order to interact with a peer group with variety of network connections that includes wired and wireless such as IP, Bluetooth, or Havi among others. (page 22, paragraph 242; Yeager) Both references do not explicitly disclose enabling users of the first and second communication devices to physically locate one another. Hanson in analogous art, however, teaches enabling users of the first and second communication devices to physically locate one another. (col. 10, lines 4-11) Therefore it would have been obvious

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to one ordinary skill in the art at the time the invention was made to modify the method disclosed by Huberman and Yeager with Hanson in order to information about the present physical location and even offer directions to the user. (col. 10, lines 4-5; Hanson)

As per claims 2 and 18:

The combination of Huberman, Yeager and Hanson teaches all the subject matter as discussed above. In addition, Huberman further discloses a method wherein obtaining a key comprises generating a random number. (Page 85, Cryptographic Details)

As per claim 3:

The combination of Huberman, Yeager and Hanson teaches all the subject matter as discussed above. In addition, Huberman further discloses a method wherein obtaining a key comprises reading a preprogrammed value from memory. (Page 85, Cryptographic Details)

As per claims 4 and 12-13:

The combination of Huberman, Yeager and Hanson teaches all the subject matter as discussed above. In addition, Huberman further discloses a method wherein encoding the attribute with the first key comprises calculating the attribute to the power of the first key to produce the first encoded value. (page 85, Private preference Matching)

As per claims 5 and 14-15:

The combination of Huberman, Yeager and Hanson teaches all the subject matter as discussed above. In addition, Huberman further discloses a method wherein the second encoded value comprises the attribute of the second device raised to the power of the second key and encoding the second encoded value with the first key comprises raising the second encoded value to the power of the first key. (page 81 and page 85, Private Preference Matching)

As per claim 6 and 16-17:

The combination of Huberman, Yeager and Hanson teaches all the subject matter as discussed above. In addition, Huberman further discloses a method comprising transmitting the first communication device's attribute to the second communication device only after determining that the third encoded value matches the fourth encoded value. (page 85, Private Preference Matching)

As per claims 7 and 10:

The combination of Huberman, Yeager and Hanson teaches all the subject matter as discussed above. In addition, Yeager further discloses enabling users of the first and second communication devices to locate one another. (page 33, paragraph 383)

As per claim 11:

Huberman teaches a communication device, comprising: a processor; memory accessible to said processor and containing an attribute and software executable on said processor; a communication interface coupled to said processor and adapted to permit the communication device to communicate with at least one other external

device; wherein, by executing said software, said processor determines whether the communication device's attribute matches an attribute stored in an external device, without receiving the attributes from the external device, based on a first encoded value received via the local communication interface from the external device, said first encoded value being indicative of an attribute stored in the external device; wherein, if the communication device's attributes matches the attribute stored in the external device, the communication device initiates contact with a user of the external device. (page 80, 3.Community discovery; page 81, Private-Preference Matching; page 85, A. Cryptographic Details and Private Preference Matching) Huberman does not explicitly disclose the communication devices comprise mobile communication devices. Yeager in analogous art, however discloses a communication devices comprise mobile communication devices. (page 22, paragraph 242) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the method disclosed by Huberman with Yeager in order to interact with a peer group with variety of network connections that includes wired and wireless such as IP, Bluetooth, or Havi among others. (page 22, paragraph 242; Yeager) Both references do not explicitly disclose enabling users of the first and second communication devices to physically locate one another. Hanson in analogous art, however, teaches enabling users of the first and second communication devices to physically locate one another. (col. 10, lines 4-11) Therefore it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the method disclosed by Huberman and Yeager with Hanson in order to information about the present physical location and



even offer directions to the user. (col. 10, lines 4-5; Hanson)

As per claim 20:

The combination of Huberman, Yeager and Hanson teaches all the subject matter as discussed above. In addition, Yeager further discloses a method wherein the processor transmits text messages to the external device via the local communication interface. (page 1, paragraph 12)

As per claim 21:

The combination of Huberman, Yeager and Hanson teaches all the subject matter as discussed above. In addition, Yeager further discloses a method wherein the communication interface provides a direct, wireless communication with the external device. (page 22, paragraph 242)

As per claim 22:

The combination of Huberman, Yeager and Hanson teaches all the subject matter as discussed above. In addition, Yeager further discloses a communication device of claim 21, wherein the communication interface implements Bluetooth. (page 22, paragraph 242)

As per claim 23:

The combination of Huberman and Yeager teaches all the subject matter as discussed above. In addition, Yeager further discloses the communication device's attribute comprises an attribute selected from the group comprising contacts, phone numbers, keywords, interests, appointments and favorite restaurants. (page 19, paragraph 215)

As per claim 25:

The combination of Huberman, Yeager and Hanson teaches all the subject matter as discussed above. In addition, Huberman further discloses a system wherein each of the first communication device and the second communication device implement a discovery mode wherein each communication device monitors for the presence of another communication device. (page 80, 3. Community Discovery)

As per claim 26:

The combination of Huberman, Yeager and Hanson teaches all the subject matter as discussed above. In addition, Yeager further discloses wherein, while in the discovery mode, a communication device wirelessly emits a beacon signal to locate another communication device. (page 73, paragraph 889)

As per claim 27:

The combination of Huberman, Yeager and Hanson teaches all the subject matter as discussed above. In addition, Huberman further discloses a system wherein the first key is distinct from the second key. (page 85, Private Preference Matching)

4. Claims 8, 9, 19 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huberman et al., "Enhancing Privacy and Trust in Electronic communities" (hereinafter Huberman) in view of Yeager et al. (hereinafter Yeager) U.S. Publication Number 2004/0133640 and in view of Hanson U.S. Patent Number 6,868,074 and further in view of Zacks et al. (hereinafter Zacks) U.S. Publication Number 2004/0192383.

As per claim 8:

The combination of Huberman, Yeager and Hanson teaches all the subject matter as discussed above. None of the references explicitly disclose a method wherein enabling the communication device users to physically locate one another comprises providing identical images on the first and second communication devices. Zacks in analogous art, however, discloses wherein enabling the communication device users to physically locate one another comprises providing identical images on the first and second communication devices. (page 5, paragraph 50) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the method disclosed by Huberman, Yeager and Hanson with Zacks in order to enable communication only between the communication device and detected communication device. (Abstract; Zacks)

As per claim 9:

The combination of Huberman, Yeager and Hanson teaches all the subject matter as discussed above. None of the references explicitly disclose a method wherein enabling the communication device users to physically locate one another comprises emitting matching audible sounds via the first and second communication devices. Zacks in analogous art, however, discloses wherein enabling the communication device users to physically locate one another comprises emitting matching audible sounds via the first and second communication devices. (page 5, paragraph 50) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the method disclosed by Huberman, Yeager and Hanson with Zacks in order to

enable communication only between the communication device and detected communication device. (Abstract; Zacks)

As per claim 19:

The combination of Huberman, Yeager and Hanson teaches all the subject matter as discussed above. None of the references explicitly disclose a method explicitly disclose a system comprising an antenna coupled to the processor, wherein the communication device is adapted to allow users of the communication and external devices to speak with one another via a service provider network. Zacks in analogous art, however, discloses a system comprising an antenna coupled to the processor, wherein the communication device is adapted to allow users of the communication and external devices to speak with one another via a service provider network. (page 8, paragraph 72) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the method disclosed by Huberman, Yeager and Hanson with Zacks in order to enable communication only between the communication device and detected communication device. (Abstract; Zacks)

As per claim 28:

The combination of Huberman, Yeager and Hanson teaches all the subject matter as discussed above. None of the references explicitly disclose emitting an audible ring tone indicative of said total number of matches. Huberman discloses an approach to multiple shared preferences to find people who answered questions in a compatible way. This can be done quite efficiently in the case where compatibility is measured by the number of yes/no questions that were answered in common. A basic

preference-matching function takes as input two lists of yes/no answers and a threshold. It outputs "true" if the number of answers where the two lists match is at or above the threshold. (page 81, Private Preference Matching) Zack teaches a communication device that can be used to communicate using any number of forms of communication including but not limited video, audio, text messaging, audio and/or symbolic messaging. (page 5, pp.50) Zack teaches using any number of forms of communication including but not limited to audio, it would have been obvious to one ordinary skill in the art at the time the invention was made to substitute one method for the other to achieve the different forms of communication.

5. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Huberman et al., "Enhancing Privacy and Trust in Electronic communities" (hereinafter Huberman) in view of Yeager et al. (hereinafter Yeager) U.S. Publication Number 2004/0133640 and in view of Hanson U.S. Patent Number 6,868,074 and further in view of Doub et al. (hereinafter Doub) US 6,594,762.

As per claim 29:

The combination of Huberman, Yeager and Hanson teaches all the subject matter as discussed above. None of the references explicitly disclose wherein, if the first communication device is physically separated from the second communication device by a predetermined distance, the first communication device generates a message indicative of said separation. Doub in analogous art, however, teaches wherein, if the first communication device is physically separated from the second communication device by a predetermined distance, the first communication device generates a

message indicative of said separation. (col. 3, line 43-61) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the method disclosed by Huberman, Yeager and Hanson with Doub in order to determine the two communications devices are located within the transmit range of each other. (col. 3, lines 47-48; Doub)

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHEWAYE GELAGAY whose telephone number is (571)272-4219. The examiner can normally be reached on 8:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on 571-272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. G./  
Examiner, Art Unit 2137

/Emmanuel L. Moise/  
Supervisory Patent Examiner, Art Unit 2137